

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Westlake Energy Corporation
Mailing Address: 2801 Post Oak Blvd., Houston, TX 77056

Source Name: Westlake Energy Project
Calvert City Combined Cycle Facility
Mailing Address: 2801 Post Oak Blvd.
Houston, TX 77056

Source Location: Hwy 1523 Industrial Loop, Calvert City, Kentucky

Permit Number: V-01-018

Log Number: 51381 (G601) (Title V)
51516 (G737) (Acid Rain)

Review Type: PSD, Title V, Acid Rain
Source ID #: 21-157-00054
ORIS Code: 55325

Regional Office: Paducah
County: Marshall

Application
Complete Date: August 9, 2000
Issuance Date: May 21, 2002
Expiration Date: May 21, 2007

**John S. Lyons, Director
Division for Air Quality**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>	<u>DATE OF ISSUANCE</u>
A. PERMIT AUTHORIZATION	1	May 21, 2002
B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	2	May 21, 2002
C. INSIGNIFICANT ACTIVITIES	19	May 21, 2002
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	20	May 21, 2002
E. SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS	21	May 21, 2002
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	22	May 21, 2002
G. GENERAL PROVISIONS	24	May 21, 2002
H. ALTERNATE OPERATING SCENARIOS	28	May 21, 2002
I. COMPLIANCE SCHEDULE	29	May 21, 2002
J. ACID RAIN	30	May 21, 2002

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

INDEX OF EMISSION UNITS

<u>Emission Units</u>	<u>Page Number</u>
<u>001 CT/HRSG1 and 002 CT/HRSG2:</u>	
GE 7FA Combined-Cycle Combustion Turbines	3
Westinghouse 501F Combined-Cycle Combustion Turbines	8
Siemens V84.3A Combined-Cycle Combustion Turbines	13
 Cooling Towers	 18
 Emergency Diesel-Fired Pump	 19
Paved Roads	19

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**OPTION A: GE 7FA****001 CT/HRSG1**

Description: Nominal 170 MW GE 7FA F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG2) 160 MW steam turbine.

01 CT1 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)

Backup Fuel: N/A

Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing

Power Output: 180 MW

Date constructed: 2002 (anticipated)

KYEIS Stack: 001

Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

002 CT/HRSG2

Description: Nominal 170 MW GE 7FA F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG1) 160 MW steam turbine.

01 CT2 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)

Backup Fuel: N/A

Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing

Power Output: 180 MW

Date constructed: 2001 (anticipated)

KYEIS Stack: 002

Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality, applies to emissions of NO_x, PM₁₀, CO, SO₂, and VOC, applies to the combined cycle turbine.

401 KAR 60:005, incorporating by reference:

40 CFR 60, Subpart GG, Standards of performance for stationary gas turbines with a heat input greater than 10.7 GJ/hr (10.14 MMBTU/hr), based on the lower heating value of the fuel fired, which commenced construction, modification or reconstruction after October 3, 1977, applies to the gas turbine portion of each combined cycle steam/electric generating system.

40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel for which construction or modification is commenced after September 18, 1978, applies to emissions resulting from combustion of fuels in each steam generating unit duct burner.

401 KAR 52:060, incorporating by reference 40 CFR 72-78 of the Acid Rain Program (see Section J of this permit for the Acid Rain permit), applies to each combined cycle turbine.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**1. Operating Limitations:**

- a. The permittee shall limit operation of each combustion turbine to combustion of natural gas.
- b. The permittee shall not operate any combustion turbine below 70 percent load, except during periods of startup, shutdown, or malfunction.
- c. Startup and shutdown are defined as operations, other during a malfunction, that are below 70% load.
- d. Startup and shutdown cycles shall be limited to no more than 10 cold starts, 50 warm starts, and 100 hot starts, and associated shutdowns, for a total of 2221 startup or shutdown hours, for each turbine in any consecutive 12-month period.

2. Emission Limitations:

- a. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load without supplemental duct firing, except during periods of startup, shutdown, or malfunction:

Pollutant	Regulation	Emission Limit	Compliance Demonstration Methods	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % O ₂ 14.3 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % O ₂ at ISO standard conditions (1-hour avg.) [60.332]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	1.5 ppmvd at 15 % oxygen 5.1 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	10.7 lb/hr (3-hour avg.)	Reference Methods 5 and 3B, and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 8.3 lb/hr (24-hour avg.)	Fuel sulfur content monitoring, and Flowrate or Heat Input monitoring.	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	0.7 ppmvd at 15 % oxygen 1.3 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
HAP			See SECTION D	

- b. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load with supplemental duct firing, except during periods of startup, shutdown, or malfunction:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

<u>Pollutant</u>	<u>Regulation</u>	<u>Emission Limit</u>	<u>Compliance Demonstration Methods</u>	<u>Compliance Monitoring Methods</u>
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % oxygen 19.1 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % oxygen at ISO standard conditions [60.332]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	200 ng/J gross energy output (1.6 lb/MWh) (30-day rolling avg.) [60.44a (d)(1)]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	3.1 ppmvd at 15 % oxygen 14.4 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	21.1 lb/hr (3-hour avg.)	Reference Methods 5 and 3B and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart Da (NSPS)	13 ng/J heat input (0.03 lb/MMBtu) [60.42a (a)]	In compliance while in compliance with PSD limit	
Opacity	40 CFR 60 Subpart Da (NSPS)	20% opacity, except for one 6-minute period per hour of not more than 27% opacity. (6-minute avg.) [60.42a (b)]	Reference Method 9 [40 CFR 60.48a (b)(3)]	In compliance while combusting natural gas
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 11.9 lb/hr (24-hour avg.)	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	86 ng/J heat input (0.20 lb/MMBtu) (30-day rolling avg.) [60.43a (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	4.9 ppmvd at 15 % oxygen 13.0 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring.
HAP			See SECTION D	

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- c. The following are the emission rates from each combined cycle combustion turbine during periods of startup or shutdown:

Pollutant	Regulation	Emission Rate	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	Cold Start 37.4 lb/hr Warm Start 30.9 lb/hr Hot Start 33.8 lb/hr Shutdown 44 lb/hr	NO _x CEMS and Flowrate or Heat Input monitoring
CO	401 KAR 51:017 (PSD)	Cold Start 187.1 lb/hr Warm Start 184.3 lb/hr Hot Start 254.3 lb/hr Shutdown 512 lb/hr	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	Cold Start 17.5 lb/hr Warm Start 18.0 lb/hr Hot Start 27.8 lb/hr Shutdown 66 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	Cold Start 1.1 lb/hr Warm Start 1.3 lb/hr Hot Start 1.5 lb/hr Shutdown 2 lb/hr	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
VOC	401 KAR 51:017 (PSD)	Cold Start 13.6 lb/hr Warm Start 14.1 lb/hr Hot Start 15 lb/hr Shutdown 16 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring

3. Testing Requirements:

- The owner or operator shall conduct performance tests as required in 40 CFR 60.8 and in accordance with and General Conditions in SECTION G(d) of this permit, using the methods and procedures specified under Compliance Demonstration Methods for each emissions limitation above.
- The sampling site for performance testing shall be located in the exhaust of the HRSGs after the control devices.
- The performance testing shall be conducted during turbine operation at or above 70% load.
- The owner or operator shall verify the startup and shutdown emission rates during the first 6 months of operation using the methods and procedures specified under Compliance Monitoring Methods above.

4. Specific Monitoring Requirements:

- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere to meet the requirements of 40 CFR Part 75.
- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring carbon monoxide (CO) emissions discharged to the atmosphere to meet the requirements of 40 CFR 60.13.
- To ensure that startup and shutdown emissions are accurately accounted for, the CEMS for NO_x and CO shall be in operation during turbine startups and shutdowns and the CEMS shall have sufficient range to accurately measure elevated emission concentrations during turbine startups or shutdowns.
- The owner or operator shall install, calibrate, maintain, and operate one of the following in order to calculate mass emissions (lb/hr):
 - Continuous flow monitoring systems in accordance with Performance Specification 6 of Appendix B and Procedure 1 of Appendix F of 40 CFR Part 60 for measuring flow of exhaust gases to the atmosphere.
 - Continuous fuel flowmeters in accordance with Appendix D of 40 CFR Part 75 to calculate heat input.
- The sampling site of all continuous monitoring systems shall be located in the exhaust of the HRSGs after the control devices.
- The owner or operator is not required to monitor the nitrogen content of the natural gas fired in the turbine.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- g. The owner or operator shall monitor quarterly the sulfur content of the natural gas fired in the turbine using the Gas Producers Association (GPA) method for Determination of Hydrogen Sulfide and Mercaptan Sulfur in Natural Gas, or any approved method specified in 40 CFR 60.335 (d). The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. The fuel sample shall be taken downstream of the sulfur injection. [40 CFR 60.334 (b)(2), Monitoring of operations; 40 CFR 60.335 (d) and (e), Test methods and procedures]
- h. If any emission rate or fuel sulfur content exceeds the applicable emission limitation, the permittee shall initiate an appropriate investigation of the cause of the exceedance and complete necessary process, control device, or monitoring system repairs or take corrective action as soon as practicable.

5. Specific Recordkeeping Requirements:

- a. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each turbine or duct burner; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7 (b)]
- b. The owner or operator shall maintain records of measurements and monitoring information in accordance with 40 CFR 60.7 (f) and General Conditions in SECTION F of this permit.
- c. The permittee shall perform the compliance calculations under Compliance Monitoring Methods above at least quarterly, and maintain records of the results.
- d. Measurement and monitoring records shall include whether the turbine was operating at or above 70% load with or without duct firing, or during a startup/shutdown period, when the measurement was taken.

6. Specific Reporting Requirements:

- a. The owner or operator shall submit notifications as required in 40 CFR 60.7 (a) and (g) and in accordance with General Conditions in SECTIONS F and G of this permit.
- b. The owner or operator shall submit to the Division a written report of the results of the initial performance tests in accordance with 40 CFR 60.8 (a) and SECTION F of this permit.
- c. The owner or operator shall submit the results of the verification of startup and shutdown emission rates with the report in General Condition F.5 in SECTION F of this permit.
- d. The owner or operator shall submit excess emissions and monitoring systems reports in accordance with 40 CFR 60.7 (c), (d) and (e); 40 CFR 60.49a (i) and (j); and SECTION F of this permit. The format of electronic reports shall be coordinated with the permitting authority and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period.
- e. The owner or operator shall report any modifications to the continuous monitoring systems which could affect the ability of the continuous monitoring systems to comply with the performance specifications.

7. Specific Control Equipment Operating Conditions:**SCR**

- a. The permittee shall operate the Selective Catalytic Reduction (SCR) system during all periods of operation at or above 70% load of the combined cycle turbine.
- b. The SCR shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.
- c. The SCR shall be operated with a maximum ammonia slip of 10 ppmvd.

Catalytic Oxidation

- d. The permittee shall operate the Catalytic Oxidation (CatOx) system during all periods of turbine operation at or above 70% load.
- e. The CatOx system shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**OPTION B: Westinghouse 501F****001 CT/HRSG1**

Description: Nominal 170 MW Westinghouse 501F F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG2) 160 MW steam turbine.

01 CT1 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)
Backup Fuel: N/A
Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing
Power Output: 180 MW
Date constructed: 2002 (anticipated)
KYEIS Stack: 001
Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

002 CT/HRSG2

Description: Nominal 170 MW Westinghouse 501F F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG1) 160 MW steam turbine.

01 CT2 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)
Backup Fuel: N/A
Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing
Power Output: 180 MW
Date constructed: 2001 (anticipated)
KYEIS Stack: 002
Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality, applies to emissions of NO_x, PM₁₀, CO, SO₂, and VOC, applies to the combined cycle turbine.

401 KAR 60:005, incorporating by reference:

40 CFR 60, Subpart GG, Standards of performance for stationary gas turbines with a heat input greater than 10.7 GJ/hr (10.14 MMBTU/hr), based on the lower heating value of the fuel fired, which commenced construction, modification or reconstruction after October 3, 1977, applies to the gas turbine portion of the combined cycle steam/electric generating system.

40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel for which construction or modification is commenced after September 18, 1978, applies to emissions resulting from combustion of fuels in the steam generating unit.

401 KAR 52:060, incorporating by reference 40 CFR 72-78 of the Acid Rain Program (see Section J of this permit for the

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Acid Rain permit), applies to the combined cycle turbine.

1. Operating Limitations:

- a. The permittee shall limit operation of each combustion turbine to combustion of natural gas.
- b. The permittee shall not operate any combustion turbine below 70 percent load, except during periods of startup, shutdown, or malfunction.
- c. Startup and shutdown are defined as operations, other during a malfunction, that are below 70% load.
- d. Startup and shutdown cycles shall be limited to no more than 10 cold starts, 50 warm starts, and 100 hot starts, and associated shutdowns, for a total of 2221 startup or shutdown hours, for each turbine in any consecutive 12-month period.

2. Emission Limitations:

- a. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load without supplemental duct firing, except during periods of startup, shutdown, or malfunction:

Pollutant	Regulation	Emission Limit	Compliance Demonstration Methods	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % O ₂ 14.7 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % O ₂ at ISO standard conditions (1-hour avg.) [60.332]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	1.5 ppmvd at 15 % oxygen 7.2 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	16.9 lb/hr (3-hour avg.)	Reference Methods 5 and 3B, and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 8.6 lb/hr (24-hour avg.)	Fuel sulfur content monitoring, and Flowrate or Heat Input monitoring	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	0.7 ppmvd at 15 % oxygen 3.1 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
HAP			See SECTION D	

- b. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load with supplemental duct firing, except during periods of startup, shutdown, or malfunction:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

<u>Pollutant</u>	<u>Regulation</u>	<u>Emission Limit</u>	<u>Compliance Demonstration Methods</u>	<u>Compliance Monitoring Methods</u>
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % oxygen 19.7 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % O ₂ at ISO standard conditions (1-hour avg.) [60.332]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	200 ng/J gross energy output (1.6 lb/MWh) (30-day rolling avg.) [60.44a (d)(1)]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	3.1 ppmvd at 15 % oxygen 16.5 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	27.3 lb/hr (3-hour avg.)	Reference Methods 5 and 3B and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart Da (NSPS)	13 ng/J heat input (0.03 lb/MMBtu) [60.42a (a)]	In compliance while in compliance with PSD limit	
Opacity	40 CFR 60 Subpart Da (NSPS)	20% opacity, except for one 6-minute period per hour of not more than 27% opacity. (6-minute avg.) [60.42a (b)]	Reference Method 9 [40 CFR 60.48a (b)(3)]	In compliance while combusting natural gas
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 12.3 lb/hr (24-hour avg.)	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	86 ng/J heat input (0.20 lb/MMBtu) (30-day rolling avg.) [60.43a (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	4.9 ppmvd at 15 % oxygen 14.8 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring.
HAP			See SECTION D	

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- c. The following are the emission rates from each combined cycle combustion turbine during periods of startup or shutdown:

Pollutant	Regulation	Emission Rate	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	Cold Start 111.2 lb/hr Warm Start 93.4 lb/hr Hot Start 98.4 lb/hr Shutdown 144 lb/hr	NO _x CEMS and Flowrate or Heat Input monitoring
CO	401 KAR 51:017 (PSD)	Cold Start 557.3 lb/hr Warm Start 560.1 lb/hr Hot Start 740.2 lb/hr Shutdown 1656 lb/hr	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	Cold Start 52.2 lb/hr Warm Start 54.0 lb/hr Hot Start 80.9 lb/hr Shutdown 214 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	Cold Start 1.0 lb/hr Warm Start 1.2 lb/hr Hot Start 1.3 lb/hr Shutdown 2 lb/hr	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
VOC	401 KAR 51:017 (PSD)	Cold Start 12.6 lb/hr Warm Start 13.3 lb/hr Hot Start 13.5 lb/hr Shutdown 16 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring

3. Testing Requirements:

- The owner or operator shall conduct performance tests as required in 40 CFR 60.8 and in accordance with and General Conditions in SECTION G(d) of this permit, using the methods and procedures specified under Compliance Demonstration Methods for each emissions limitation above.
- The sampling site for performance testing shall be located in the exhaust of the HRSGs after the control devices.
- The performance testing shall be conducted during turbine operation at or above 70% load.
- The owner or operator shall verify the startup and shutdown emission rates during the first 6 months of operation using the methods and procedures specified under Compliance Monitoring Methods above.

4. Specific Monitoring Requirements:

- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere to meet the requirements of 40 CFR Part 75.
- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring carbon monoxide (CO) emissions discharged to the atmosphere to meet the requirements of 40 CFR 60.13.
- To ensure that startup and shutdown emissions are accurately accounted for, the CEMS for NO_x and CO shall be in operation during turbine startups and shutdowns and the CEMS shall have sufficient range to accurately measure elevated emission concentrations during turbine startups or shutdowns.
- The owner or operator shall install, calibrate, maintain, and operate one of the following in order to calculate mass emissions (lb/hr):
 - Continuous flow monitoring systems in accordance with Performance Specification 6 of Appendix B and Procedure 1 of Appendix F of 40 CFR Part 60 for measuring flow of exhaust gases to the atmosphere.
 - Continuous fuel flowmeters in accordance with Appendix D of 40 CFR Part 75 to calculate heat input.
- The sampling site of all continuous monitoring systems shall be located in the exhaust of the HRSGs after the control devices.
- The owner or operator is not required to monitor the nitrogen content of the natural gas fired in the turbine.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- g. The owner or operator shall monitor quarterly the sulfur content of the natural gas fired in the turbine using the Gas Producers Association (GPA) method for Determination of Hydrogen Sulfide and Mercaptan Sulfur in Natural Gas, or any approved method specified in 40 CFR 60.335 (d). The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. The fuel sample shall be taken downstream of the sulfur injection. [40 CFR 60.334 (b)(2), Monitoring of operations; 40 CFR 60.335 (d) and (e), Test methods and procedures]
- h. If any emission rate or fuel sulfur content exceeds the applicable emission limitation, the permittee shall initiate an appropriate investigation of the cause of the exceedance and complete necessary process, control device, or monitoring system repairs or take corrective action as soon as practicable.

5. Specific Recordkeeping Requirements:

- a. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each turbine or duct burner; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7 (b)]
- b. The owner or operator shall maintain records of measurements and monitoring information in accordance with 40 CFR 60.7 (f) and General Conditions in SECTION F of this permit.
- c. The permittee shall perform the compliance calculations under Compliance Monitoring Methods above at least quarterly, and maintain records of the results.
- d. Measurement and monitoring records shall include whether the turbine was operating at or above 70% load with or without duct firing, or during a startup/shutdown period, when the measurement was taken.

6. Specific Reporting Requirements:

- a. The owner or operator shall submit notifications as required in 40 CFR 60.7 (a) and (g) and in accordance with General Conditions in SECTIONS F and G of this permit.
- b. The owner or operator shall submit to the Division a written report of the results of the initial performance tests in accordance with 40 CFR 60.8 (a) and SECTION F of this permit.
- c. The owner or operator shall submit the results of the verification of startup and shutdown emission rates with the report in General Condition F.5 in SECTION F of this permit.
- d. The owner or operator shall submit excess emissions and monitoring systems reports in accordance with 40 CFR 60.7 (c), (d) and (e); 40 CFR 60.49a (i) and (j); and SECTION F of this permit. The format of electronic reports shall be coordinated with the permitting authority and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period.
- e. The owner or operator shall report any modifications to the continuous monitoring systems which could affect the ability of the continuous monitoring systems to comply with the performance specifications.

7. Specific Control Equipment Operating Conditions:**SCR**

- a. The permittee shall operate the Selective Catalytic Reduction (SCR) system during all periods of turbine operation at or above 70% load of the combined cycle turbine.
- b. The SCR shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.
- c. The SCR shall be operated with a maximum ammonia slip of 10 ppmvd.

Catalytic Oxidation

- d. The permittee shall operate the Catalytic Oxidation (CatOx) system during all periods of turbine operation at or above 70% load.
- e. The CatOx system shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**OPTION C: Siemens V84.3A****001 CT/HRSG1**

Description: Nominal 170 MW Siemens V84.3A F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG2) 160 MW steam turbine.

01 CT1 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)

Backup Fuel: N/A

Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing

Power Output: 180 MW

Date constructed: 2002 (anticipated)

KYEIS Stack: 001

Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

002 CT/HRSG2

Description: Nominal 170 MW Siemens V84.3A F-class combustion turbine operated in combined-cycle mode with heat recovery steam generator with supplemental duct firing for electrical generation
Steam is ducted to either an associated 80 MW steam turbine or a shared (with CT/HRSG1) 160 MW steam turbine.

01 CT2 Combined-cycle combustion turbine natural gas combustion

Primary Fuel: Natural gas supplied by pipeline (1003 MMBtu/scf)

Backup Fuel: N/A

Rated Capacity: 1515 MMBtu/hr lower heating value (LHV) from combustion turbine
585 MMBtu/hr higher heating value (HHV) from supplemental duct firing

Power Output: 180 MW

Date constructed: 2002 (anticipated)

KYEIS Stack: 002

Controls: Dry Low NO_x burners for NO_x
Selective Catalytic Reduction (SCR) for NO_x
Catalytic Oxidation for CO, VOC, and HAPs

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality, applies to emissions of NO_x, PM₁₀, CO, SO₂, and VOC, applies to the combined cycle turbine.

401 KAR 60:005, incorporating by reference:

40 CFR 60, Subpart GG, Standards of performance for stationary gas turbines with a heat input greater than 10.7 GJ/hr (10.14 MMBTU/hr), based on the lower heating value of the fuel fired, which commenced construction, modification or reconstruction after October 3, 1977, applies to the gas turbine portion of the combined cycle steam/electric generating system.

40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel for which construction or modification is commenced after September 18, 1978, applies to emissions resulting from combustion of fuels in the steam generating unit.

401 KAR 52:060, incorporating by reference 40 CFR 72-78 of the Acid Rain Program (see Section J of this permit for the Acid Rain permit), applies to the combined cycle turbine.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**1. Operating Limitations:**

- a. The permittee shall limit operation of each combustion turbine to combustion of natural gas.
- b. The permittee shall not operate any combustion turbine below 70 percent load, except during periods of startup, shutdown, or malfunction.
- c. Startup and shutdown are defined as operations, other during a malfunction, that are below 70% load.
- d. Startup and shutdown cycles shall be limited to no more than 10 cold starts, 50 warm starts, and 100 hot starts, and associated shutdowns, for a total of 2221 startup or shutdown hours, for each turbine in any consecutive 12-month period.

2. Emission Limitations:

- a. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load without supplemental duct firing, except during periods of startup, shutdown, or malfunction:

Pollutant	Regulation	Emission Limit	Compliance Demonstration Methods	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % O ₂ 14.5 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % O ₂ at ISO standard conditions (1-hour avg.) [60.332]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	1.5 ppmvd at 15 % oxygen 3.5 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	6.5 lb/hr (3-hour avg.)	Reference Methods 5 and 3B, and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 8.4 lb/hr (24-hour avg.)	Fuel sulfur content monitoring, and Flowrate or Heat Input monitoring	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	0.7 ppmvd at 15 % oxygen 1.1 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring
HAP			See SECTION D	

- b. The following emission limits apply to each combined cycle combustion turbine during turbine operation at or above 70% load with supplemental duct firing, except during periods of startup, shutdown, or malfunction:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

<u>Pollutant</u>	<u>Regulation</u>	<u>Emission Limit</u>	<u>Compliance Demonstration Methods</u>	<u>Compliance Monitoring Methods</u>
NO _x	401 KAR 51:017 (PSD)	2.5 ppmvd at 15 % oxygen 15.6 lb/hr (3-hour avg.)	Reference Method 20	NO _x CEMS and Flowrate or Heat Input monitoring
	40 CFR 60 Subpart GG (NSPS)	Minimum 75 ppmvd at 15 % O ₂ at ISO standard conditions (1-hour avg.) [60.332]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	200 ng/J gross energy output (1.6 lb/MWh) (30-day rolling avg.) [60.44a (d)(1)]	In compliance while in compliance with PSD limit	
CO	401 KAR 51:017 (PSD)	3.1 ppmvd at 15 % oxygen 5.9 lb/hr (3-hour avg.)	Reference Method 10	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	7.5 lb/hr (3-hour avg.)	Reference Methods 5 and 3B and Flowrate or Heat Input monitoring	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart Da (NSPS)	13 ng/J heat input (0.03 lb/MMBtu) [60.42a (a)]	In compliance while in compliance with PSD limit	
Opacity	40 CFR 60 Subpart Da (NSPS)	20% opacity, except for one 6-minute period per hour of not more than 27% opacity. (6-minute avg.) [60.42a (b)]	Reference Method 9 [40 CFR 60.48a (b)(3)]	In compliance while combusting natural gas
SO ₂	401 KAR 51:017 (PSD)	2.0 gr/100 dscf fuel sulfur content 9.0 lb/hr (24-hour avg.)	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
	40 CFR 60 Subpart GG (NSPS)	0.015% by volume at 15% oxygen, or 0.8 percent by weight sulfur fuel content [60.333 (b)]	In compliance while in compliance with PSD limit	
	40 CFR 60 Subpart Da (NSPS)	86 ng/J heat input (0.20 lb/MMBtu) (30-day rolling avg.) [60.43a (b)]	In compliance while in compliance with PSD limit	
VOC	401 KAR 51:017 (PSD)	4.9 ppmvd at 15 % oxygen 2.4 lb/hr (3-hour avg.)	Reference Methods 25A and 18	Calculations using most recent stack test data, and Flowrate or Heat Input monitoring.
HAP			See SECTION D	

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- c. The following are the emission rates from each combined cycle combustion turbine during periods of startup or shutdown:

Pollutant	Regulation	Emission Rate	Compliance Monitoring Methods
NO _x	401 KAR 51:017 (PSD)	Cold Start 102.1 lb/hr Warm Start 137.9 lb/hr Hot Start 210.8 lb/hr Shutdown 340 lb/hr	NO _x CEMS and Flowrate or Heat Input monitoring
CO	401 KAR 51:017 (PSD)	Cold Start 109.4 lb/hr Warm Start 125.4 lb/hr Hot Start 139.5 lb/hr Shutdown 96 lb/hr	CO CEMS and Flowrate or Heat Input monitoring
PM ₁₀	401 KAR 51:017 (PSD)	Cold Start 5.4 lb/hr Warm Start 5.9 lb/hr Hot Start 7.3 lb/hr Shutdown 8 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring
SO ₂	401 KAR 51:017 (PSD)	Cold Start 2.2 lb/hr Warm Start 1.9 lb/hr Hot Start 2.4 lb/hr Shutdown 2 lb/hr	Fuel sulfur content monitoring and Flowrate or Heat Input monitoring.
VOC	401 KAR 51:017 (PSD)	Cold Start 5.9 lb/hr Warm Start 5.9 lb/hr Hot Start 5.7 lb/hr Shutdown 6 lb/hr	Calculations using stack test or manufacturer's data, and Flowrate or Heat Input monitoring

3. Testing Requirements:

- The owner or operator shall conduct performance tests as required in 40 CFR 60.8 and in accordance with and General Conditions in SECTION G(d) of this permit, using the methods and procedures specified under Compliance Demonstration Methods for each emissions limitation above.
- The sampling site for performance testing shall be located in the exhaust of the HRSGs after the control devices.
- The performance testing shall be conducted during turbine operation at or above 70% load.
- The owner or operator shall verify the startup and shutdown emission rates during the first 6 months of operation using the methods and procedures specified under Compliance Monitoring Methods above.

4. Specific Monitoring Requirements:

- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere to meet the requirements of 40 CFR Part 75.
- The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring carbon monoxide (CO) emissions discharged to the atmosphere to meet the requirements of 40 CFR 60.13.
- To ensure that startup and shutdown emissions are accurately accounted for, the CEMS for NO_x and CO shall be in operation during turbine startups and shutdowns and the CEMS shall have sufficient range to accurately measure elevated emission concentrations during turbine startups or shutdowns.
- The owner or operator shall install, calibrate, maintain, and operate one of the following in order to calculate mass emissions (lb/hr):
 - Continuous flow monitoring systems in accordance with Performance Specification 6 of Appendix B and Procedure 1 of Appendix F of 40 CFR Part 60 for measuring flow of exhaust gases to the atmosphere.
 - Continuous fuel flowmeters in accordance with Appendix D of 40 CFR Part 75 to calculate heat input.
- The sampling site of all continuous monitoring systems shall be located in the exhaust of the HRSGs after the control devices.
- The owner or operator is not required to monitor the nitrogen content of the natural gas fired in the turbine.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

- g. The owner or operator shall monitor quarterly the sulfur content of the natural gas fired in the turbine using the Gas Producers Association (GPA) method for Determination of Hydrogen Sulfide and Mercaptan Sulfur in Natural Gas, or any approved method specified in 40 CFR 60.335 (d). The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. The fuel sample shall be taken downstream of the sulfur injection. [40 CFR 60.334 (b)(2), Monitoring of operations; 40 CFR 60.335 (d) and (e), Test methods and procedures]
- h. If any emission rate or fuel sulfur content exceeds the applicable emission limitation, the permittee shall initiate an appropriate investigation of the cause of the exceedance and complete necessary process, control device, or monitoring system repairs or take corrective action as soon as practicable.

5. Specific Recordkeeping Requirements:

- a. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each turbine or duct burner; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7 (b)]
- b. The owner or operator shall maintain records of measurements and monitoring information in accordance with 40 CFR 60.7 (f) and General Conditions in SECTION F of this permit.
- c. The permittee shall perform the compliance calculations under Compliance Monitoring Methods above at least quarterly, and maintain records of the results.
- d. Measurement and monitoring records shall include whether the turbine was operating at or above 70% load with or without duct firing, or during a startup/shutdown period, when the measurement was taken.

6. Specific Reporting Requirements:

- a. The owner or operator shall submit notifications as required in 40 CFR 60.7 (a) and (g) and in accordance with General Conditions in SECTIONS F and G of this permit.
- b. The owner or operator shall submit to the Division a written report of the results of the initial performance tests in accordance with 40 CFR 60.8 (a) and SECTION F of this permit.
- c. The owner or operator shall submit the results of the verification of startup and shutdown emission rates with the report in General Condition F.5 in SECTION F of this permit.
- d. The owner or operator shall submit excess emissions and monitoring systems reports in accordance with 40 CFR 60.7 (c), (d) and (e); 40 CFR 60.49a (i) and (j); and SECTION F of this permit. The format of electronic reports shall be coordinated with the permitting authority and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period.
- e. The owner or operator shall report any modifications to the continuous monitoring systems which could affect the ability of the continuous monitoring systems to comply with the performance specifications.

7. Specific Control Equipment Operating Conditions:**SCR**

- a. The permittee shall operate the Selective Catalytic Reduction (SCR) system during all periods of turbine operation at or above 70% load.
- b. The SCR shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.
- c. The SCR shall be operated with a maximum ammonia slip of 10 ppmvd.

Catalytic Oxidation

- d. The permittee shall operate the Catalytic Oxidation (CatOx) system during all periods of turbine operation at or above 70% load.
- e. The CatOx system shall be operated and maintained in accordance with written procedures developed, maintained, and reviewed at least annually by the permittee.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**Cooling Towers**

Description: Particulate mist from condensing steam from HRSGs to water for recirculation to HRSGs
Consisting of 1 set of 8 cells (2-on-1) or 2 sets of 4 cells (2-on-2 configuration)

01 Water cooling

Rated Capacity: 4,200,000 gallons of water/hr

Date constructed: 2002 (anticipated)

KYEIS Stack: 003 - 010

Controls: High-efficiency drift eliminators (maximum 0.0006% drift)

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality, applies for PM₁₀.

1. **Operating Limitations:** None

2. **Emission Limitations:**

The following emission limit applies to each cooling tower cell:

Pollutant	Regulation	Emission Limit	Compliance Demonstration Methods	Compliance Monitoring Methods
PM ₁₀	401 KAR 51:017 (PSD)	0.029 lb/hr per cell (3-hour avg.)	None	Calculations using water flowrates and most recent TDS test result

3. **Testing Requirements:**

The permittee shall perform a TDS test on the recirculating water initially, in accordance with General Condition G(d)5, and annually thereafter.

4. **Specific Monitoring Requirements:**

The permittee shall monitor the circulation rate of water.

5. **Specific Recordkeeping Requirements:**

- The permittee shall maintain a log of the daily water circulation rate.
- The permittee shall perform the compliance calculations using the following equation at least quarterly, and maintain records of the results.

$$E \left(\frac{lb}{hr} \right) = 0.000025 \times TDS \text{ (ppmw)} \times \text{water flowrate} \left(\frac{gal}{hr} \right)$$

- The permittee shall maintain a log of the results of the maintenance inspections of the drift eliminators, or reasons why a maintenance inspection was not performed, and a description of any corrective actions taken.

6. **Specific Reporting Requirements:** None

7. **Specific Control Equipment Operating Conditions:**

The permittee shall perform annual maintenance inspections of the drift eliminators and perform any corrective actions necessary.

8. **Alternate Operating Scenarios:** None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
Emergency diesel Fire Pump (<500 hr/yr)	401 KAR 51:017
<1000 gal Emergency Fire Pump Diesel Fuel storage tank	None
Paved roads fugitive dust emissions	401 KAR 51:017

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. NO_x, CO, VOC, SO₂, TSP, PM₁₀, and HAP emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
2. As required by Section 1b of the material incorporated by reference in 401 KAR 52:020, Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
3. The permittee shall submit in writing the turbine manufacturer and model number, configuration and layout (2-on-1 or 2-on-2), and stack coordinates prior to beginning construction.
4. The permittee shall perform an initial stack test in accordance with EPA Reference Method 308 or other EPA approved method for formaldehyde on all emission units listed in SECTION B and C of this permit which emit formaldehyde within six months of permit issuance in order to verify that formaldehyde HAP emissions are less than 10 TPY.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements.
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.[Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1]
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
 - e. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
[Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]
6. The semi-annual reports are due prior to January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.]
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

**Division for Air Quality
Paducah Regional Office
4500 Clarks River Road
Paducah, Kentucky 42003**

**U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960**

**Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601**

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]
6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15)b]
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]

SECTION G - GENERAL CONDITIONS

11. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]
15. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 52:020, Section 12]
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the division sets. [401 KAR 52:030 Section 8(2)]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.

SECTION G - GENERAL CONDITIONS

- b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the cabinet may extend these time periods if the source shows good cause.
 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the cabinet.
 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration or test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
 6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within ten (10) working days of the time when emission limitations were exceeded due to the emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- e. This requirement does not relieve the source from other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

SECTION G - GENERAL CONDITIONS

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

**RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346**

2. If requested, submit additional relevant information to the division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, Condition (a)15, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

Not Applicable

SECTION I - COMPLIANCE SCHEDULE

Not Applicable

SECTION J – ACID RAIN**PHASE II ACID RAIN PERMIT**

Plant Name:	Westlake Energy Project, Calvert City Combined Cycle Facility		
Plant Location:	Hwy 1523 Industrial Loop, Calvert City, Kentucky		
Owner:	Westlake Energy Corporation		
Mailing Address:	2801 Post Oak Blvd., Houston, Texas 77056		
Region:	Paducah-Cairo	County:	Marshall
ORIS Code:	55325		

ACID RAIN PERMIT CONTENTS

1. Statement of Basis
2. SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
3. Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
4. The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application.
5. Summary of Actions

SECTION J – ACID RAIN

1. Statement of Basis:

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 52:020, Title V Permits, 401 KAR 52:060, Acid Rain Permits, and Federal Regulation 40 CFR Part 76.

SECTION J – ACID RAIN

PERMIT (Conditions)

Plant Name: Westlake Energy Project, Calvert City Combined Cycle Facility
Affected Unit: 001 (CT/HRSG1)

2. SO₂ Allowance Allocations and NO_x Requirements for the affected unit:

SO ₂ Allowances	Year				
	2001	2002	2003	2004	2005
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO _x Requirements	
NO _x Limits	N/A**

* For newly-constructed units there are no SO₂ allowance allocations per U.S. EPA Acid Rain Program.

** This unit currently does not have applicable NO_x limits set by 40 CFR Part 76.

SECTION J – ACID RAIN

PERMIT (Conditions)

Plant Name: Westlake Energy Project, Calvert City Combined Cycle Facility
Affected Unit: 002 (CT/HRSG2)

3. SO₂ Allowance Allocations and NO_x Requirements for the affected unit:

SO ₂ Allowances	Year				
	2001	2002	2003	2004	2005
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO _x Requirements	
NO _x Limits	N/A**

* For newly-constructed units there are no SO₂ allowance allocations per U.S. EPA Acid Rain Program.

** This unit currently does not have applicable NO_x limits set by 40 CFR, part 76.

SECTION J – ACID RAIN

PERMIT (Conditions)

2. Comments, Notes, and Justifications:

The two (2) combustion turbines, units 001 and 002 will be constructed after the SO₂ allocation date; therefore these units will have no SO₂ allowances allocated by U.S. EPA and must obtain offsets.

The two (2) combustion turbines, units 001 and 002 do not have applicable NO_x limits set by 40 CFR Part 76.

3. Permit Application: Attached

The Phase II Permit Application is a part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application.

4. Summary of Actions:

Present Action:

1. Draft Phase II Permit (# V-01-018) has been proposed for public comment.